# CLARION

# SERVICE MANUAL

NISSAN MOTOR CORPORATION

137E ALONDRA BLVD., GARDENA, CALIF. 90247

# DATSUN CUSTOM FACTORY CAR RADIO

MODEL RU-107-501(CR-140E1)

7 TRANSISTORS

411 - 1000



#### \* SPECIFICATIONS

#### Circuit:

Push-Button Tuning Super-Heterodyne System with R.F.Amplifier.

Tuning Range:

530kc/s-1605kc/s.

Intermediate Frequency:

262.5kc/s

Sensitivity:

Less than 25 dB.

Selectivity:

More than 20 dB at 10 kc detuned.

Output Impedance:

8 Ohm.

Output:

More than 2.5W.

Power supply:

12V.D.C....Less than 0.6 A.

Polarity:

Reversible Switch for positive or negative ground.

Transistor:

7 Transistors 2 diodes.

Dimensions: Receiver Unit only:

Width: 6 \( \frac{5}{6} \) Height: 2"

Depth: 4\( \frac{5}{6} \)

Weight:

Receiver Unit only: 1.2 kg

#### \* CONTENTS

RA-109-227(CR-217B3-6) RECEIVER UNIT 1 EACH SPA-122-004(S-122E) SPEAKER ASS'Y 1 EACH PAN-012-001(PA-38B) ANTENNA ASS'Y 1 EACH 300-049-000(300-49) #49 REAR BRACKET 1 EACH 280-007-000(GA-7) INSTRUCTION TAG 1 EACH 923-005-000(AC-429) SPARE FUSES 2 EACH 921-004-000(AC-220) MOUNTING SCREWS 1 SET

#### \*FEATURE

This Car-radio is specially designed for the DATSUN "Bluebird"

Use of planer transistor assures stable performance at both high and low temperatures.

Use of SEPP OTL (Single Ended Push Pull Output Transformer Less) circuit gives excellent tone quality.

Our AGC circuit provides clear, stable reception even at great distance from broadcasting stations.

# \*PRECAUTION ON POLARITY SETTINGS DURING INSTALLATION OF RADIO

First, check whether your car has a positive or negative ground.

Our export radios are set for negative ground cars.

If your car has a positive ground, see Fig. I push sliding switch up or to the plus (+) mark. Caution: If the wrong ground is selected, you will burn out the printed circuit.

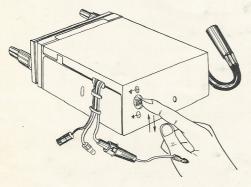
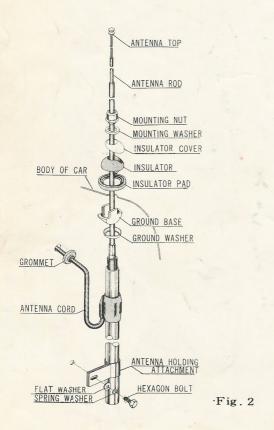


Fig. 1

#### \*INSTALLATION OF ANTENNA



- 1. Select position where antenna is to be mounted and be sure that there is sufficient clearance on the underside from obstacles before pin punching a center hole.
- 2. Use 1" diameter drill for mounting the antenna.

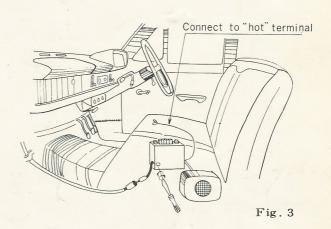
- 3. Disassemble the upper portion of the Antenna by loosening the Mounting Nut and removing all small parts up to and including the Insulator Pad as shown in Fig. 2. Do not remove the telescopic antenna section from main body.
- 4. Place Antenna Holding Attachment to main body, then take and mount the antenna body from the underside of the car through the 1" hole and assemble parts and nuts, etc. as in explosion diagram.

Be certain that the Insulator and the Ground Base are mated correctly and set the angle of the antenna before tightening the Mounting Nut. Drill hole where the Antenna Holding Attachment can be firmly set and the antenna will be at the proper angle.

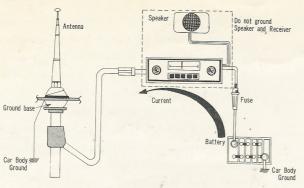
Tighten the bolt and nut holding the Antenna Attachment to the body of the car.

#### \*TRIAL RECEPTION

Befor final mounting, place radio receiver and speaker on front seat of car and connect all wirings as for normal operation. See Fig. 3.



- 1. Speaker cord extending from the radio unit should be plugged into the speaker terminal and the Antenna lead-in plug set in the radio receiver unit.
- 2. Connect the Power Supply Wire to a "hot" lead behind the Car Switch and switch on the radio, after the antenna is extended fully.
- 3. If no sound comes from the radio, the antenna is not properly grounded therefore polish area around the base of the antenna where it meets the car's body. See Fig. 4.
- Check electrical connections again. If there is much static the antenna is not properly grounded, so repolish for perfect grounding.
- 5. Adjustment of Antenna Trimmer is done by setting the dial pointer around the 1400 kc mark and turning the screw clockwise or counterclockwise until the signal comes in strongest and clearest. See Fig. 5.



PEAGUN BOLT

2 FLAT

NO.8 S

SUPPORT STRAP

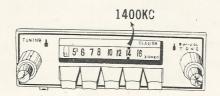
4 4MM SPRING WASHER

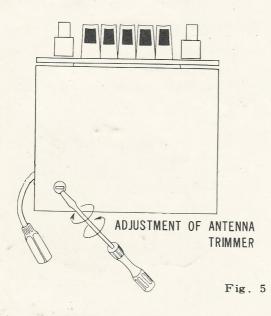
SYEARER ASSY

Ground

Fig. 4

Fig. 7



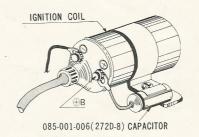


## \*INSTALLATION OF NOISE SUPPRESSORS

Place Noise Suppressor (274B) about three inches from the distributor cap and connect each Spark Plug Noise Suppressors (274A) directly on plug terminals. Cut off 1" off spark plug wires and insert into respective spark plug noise suppressors. (274A). See Fig. 8.

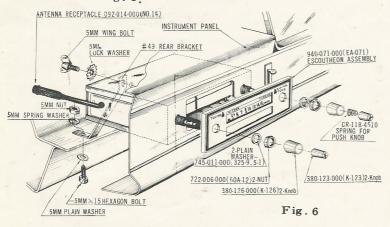
#### Caution:

In case that CAR has the R.R. cable
(Radio Resistance cable) in which a hightension cable is assembled, noise suppressor
(274A&274B)should not be used in any conditions.



### \* RECEIVER UNIT INSTALLATION

Refer to Fig. 6.



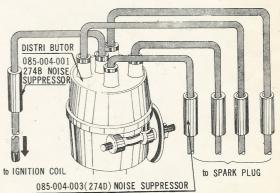
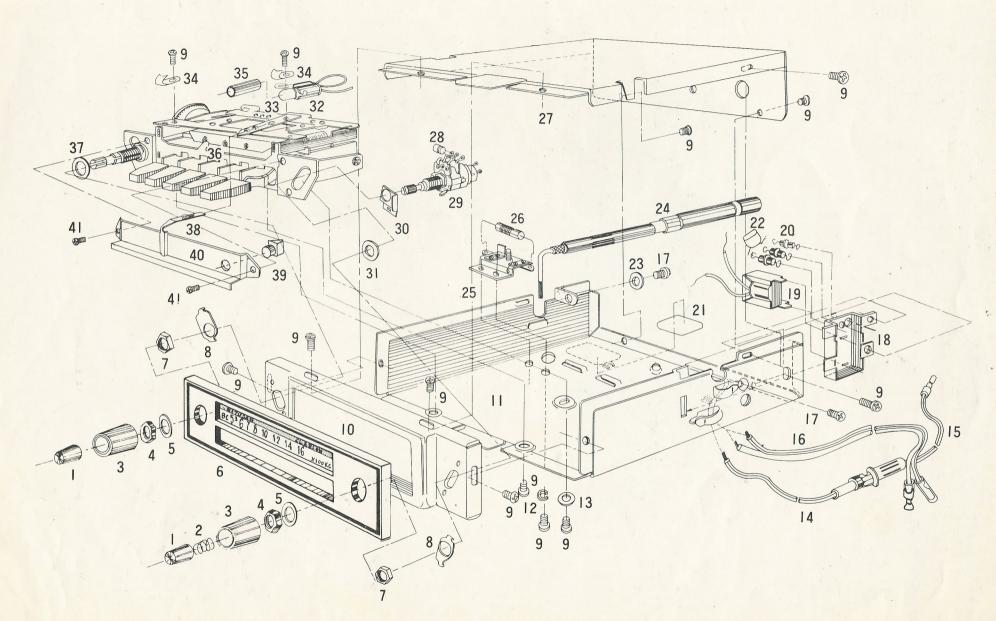
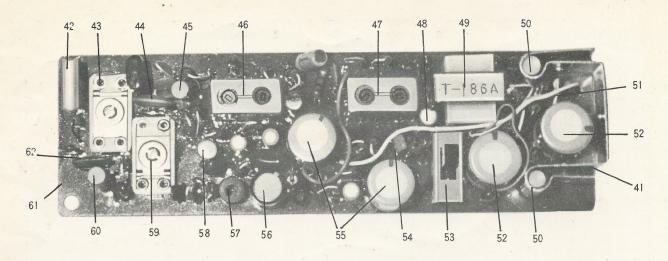


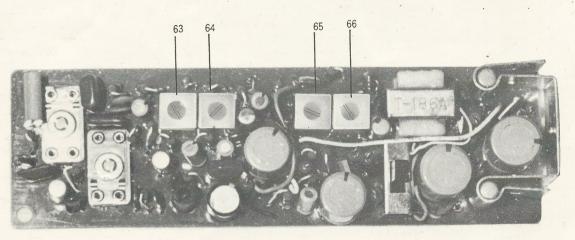
Fig. 8

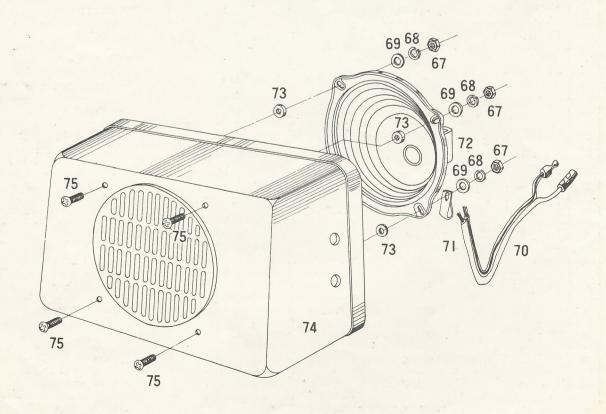
## \*SPEAKER ASS'Y INSTALLATION

Refer to Fig. 7.



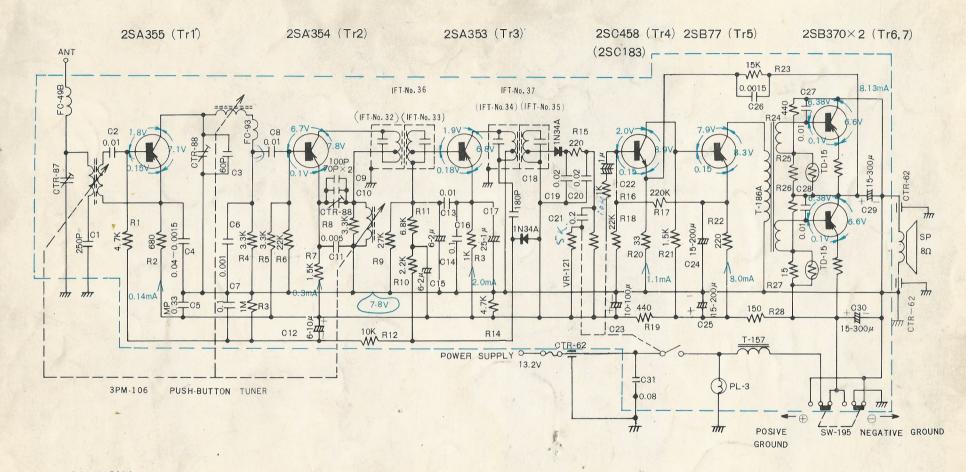






## \*PART'S LIST

DIA-			DIA.		
DIA- GRAM NO.	PARTS NUMBER	DESCRIPTION	DIA- GRAM NO.	PARTS NUMBER	DESCRIPTION
1	380-123-000 (K-123)	KNOB	39	375-001-000 (PM-1)	PILOT INDICATOR
2	750 –043 –000 (CR –118 –4510 )	SPRING, For Push Knob	40	374-012-000 (UH-12)	BACK COVER PLATE
3	380-126-000 (K-126)	KNOB	41	RA-11	RADIATOR PLATE
4	$^{722-006-000}_{\ \ (60\mathrm{A}-12)}$	NUT	42	50V0.33µ(M)	LACQUER FILM CAPACITOR
5	$745 - 011 - 000 \ (325 - 9.5 - 1)$	PLAIN WASHER	43	004-088-000 (CTR-88)	TRIMMER
6	940-071-000 (E A-071)	ESCUTHEON ASSEMBLY	44	100PF	CAPACITOR
7	722-001-000 (NT-1)	NUT	45	2 SA353	TRANSISTOR
8	CR-217-4503	RETAINER For Push Button Tuner & Variable Resistor Shaft Fixed	46	005-036-000 (IFT. No. 36)	INTERMEDIATE FREQUENCY TRANSFORMER NO. 36
9	3 mm×4 mm	SCREW	47	005-037-000 (IFT. No. 37)	" "
10	308-006-100 (UB-6)	FRONT COVER PLATE	48	2SB77	TRANSISTOR
11	311-002-001 (UG-7)	CASE, For Radio Chassis	49	006-047-001 (T-186 A)	INPUT TRANSFORMER
12	3 mm WASHER	SPRING WASHER	50	2 SB370	TRANSISTOR
13	3 mm WASHER	PLAIN WASHER	51	002-015-000 (TD-15)	THERMISTOR
14	850-056-001 (CS-56-1)	POWER SUPPLY CORD	52	VL15V 300μF	ELECTORLYTIC CAPACITOR
15	850-118-002 (CS-118-2)	POWER SUPPLY CORD	53	SW -195	SLIDE SWITCH
16	851-073-000 (CSP-73)	SPEAKER CORD	54	2 SC458(2 SC183)	SILICON TRANSISTOR
17	$3 \text{ mm} \times 6 \text{ mm}$	SCREW	55	VL15V 200μF	ELECTROLYTIC CAPACITOR
18	315-005-000 (U1-5)	MOUNTING BASE, For Bypass Capacitor	56	VL10V 100μF	" "
19	009-018-000 (T-157)	CHOKE TRANSFORMER	57	010-093-000 (FC-93)	SERIES COIL
20	040 - 003 - 000 (CTR-62)	BYPASS CAPACITOR	58	2 SA355	TRANSISTOR
21	CR-140-4502	SET PLATE	59	004-088-000 (CTR-88)	TRIMMER
22	0.08 MF	MYLER CAPACITOR	60	2 SA354	TRANSISTOR
23	F-1	FIBER WASHER	61	099-177-000 (PW-177-A-5)	PRINTED CIRCUIT BOARD
24	$092 - 014 - 000 \ (302 - 14)$	ANTENNA RECEPTACLE NO.14	62	50PF	CAPACITOR
25	004-087-000 (CTR-87)	ANTENNA TRIMMER	63	005-032-000 (IFT. No. 32)	INTERMEDIATE FREQUENCY TRANSFORMER NO. 32
26	010-049-001 (FC-49B)	SERIES COIL	64	005-033-000 (IFT. No. 33)	" NO. 33
27	310-003-000 (UF-9)	COVER, For Radio Chassis	65	005-034-000 (1 F T. No. 34)	" NO. 34
28	VL15V02MF	ELECTROLYTIC CAPACITOR	66	005-035-000 (IFT. No. 35)	" NO. 35
29	012-121-000 (VR-121)	VARIABLE RESISTOR	67	3 mm NUT	NUT
30	CR-206-4515	VARIABLE RESISTOR WASHER	68	3 mm WASHER	SPRING WASHER
31	745-014-000 (325-9.5-4)	PLAIN WASHER	69	3 mm WASHER	PLAIN WASHER
32	070-016-001 (SB-16B)	SOCKET, For Dial Scale	70	851-074-000 (CSP-74)	SPEAKER CORD
33	017-003-000 (PL-3)	PILOT LAMP	71	305 — 7	CORD CLIP
34	750-033-000 (SR-33)	GROUNDING SPRING	72	090-008-001 (SP-5-12A)	SPEAKER
35	8.5¢ ×30	VINYL TUBE	73	G-43	RUBBER WASHER
36	3PM -106	PUSH BUTTON TUNER	74	S-107-2502	SPEAKER CASE
37	745 -022 -000 (CR -200 -4514 )	WASHER	75	3mm × 16mm	SCREW
38	376-006-000 (ND-12)	NEEDLE			



#### CAUTION:

- \*Line voltage: 13.2V
- \* Values of currents shown herein are based when no signals being received.
- \* Transistor 2SC458 (2SC183) is NPN type